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DEATH VALLEY

The fascination which Death Valley has held for so many persons is especially strong for geologists, as here, preserved in bold, barren mountain slopes of eastern California is one of the most complete geologic records of any part of the earth's crust. Within Death Valley and the mountain ranges that border it, rocks of an exceedingly great variety, representing virtually every geologic period, are exposed. Equally impressive to the geologist are the effects of severe deformation which these rocks show in many places.

As a topographic feature, Death Valley is part of a great, northwest-trending trough that can be traced for at least 150 miles. (Only the central part of this trough is included on the Death Valley Sheet of the Geologic Map of California, available in November.) The floor of the valley averages about 8 miles in width and is bordered by steep-faced mountain ranges. The Panamint Range forms the west side of the valley for the distance of about 100 miles. Emigrant Wash drains eastward into the valley, dividing the southern part of the range from the northern part which is also known as the Cottonwood Mountains. The southern part of the Range culminates in Telescope Peak, 11,049 feet above sea level, opposite the valley's lowest point--282 feet below sea level, the lowest in the Western Hemisphere. Forming the east side of the valley and opposite the Panamint Range are three mountain masses. From north to south these are the Grapevine, Funeral, and Black Mountains. Although somewhat lower, they compare favorably with Panamint Range, in scenic and geologic interest.

The most-traveled routes into Death Valley are from the west (via State Highway 190 from southern Owens Valley), the southwest (from Trona through Wild Rose Canyon and Immigrant Wash), and the south (via State Highway 127 from Baker). Many who have visited Death Valley recommend a two-day, Trona-to-Baker circuit that could, for example, include the following: (1) a noon-time visit to the area of the old beehive charcoal kilns in Wild Rose Canyon on the west slope of the Panamint Range; (2) an afternoon panoramic view of Death Valley from Aguereberry Point at the crest of the Panamint Range; (3) an overnight stay at Panamint Springs or Furnace Creek; (4) a morning trip, via the historic borax mining camp of Ryan, to Dante's View at the crest of the Black Mountains; and (5) an afternoon journey from Furnace Creek, past Bad Water on the east side of Death Valley, over Salsberry Pass in the southern part of the Black Mountains, and through the oasis-like settlement of Shoshone to Baker. A traveler along this route can observe, from his car window, most of the geological features outlined below.

Precambrian Rocks

The oldest rocks in the Death Valley region are probably best observed in the somber, gray exposures that form most of the west side of the Black Mountains. These rocks are metamorphic in origin and of early Precambrian age. They consist mostly of granitic gneiss and mica schist formed by the recrystallization of sandy and shaly strata. These rocks are comparable in age and character with the very old rocks in the bottom of the Grand Canyon 200 miles

Furnace Creek Inn, Death Valley, California. View eastward at mouth of Furnace Creek Wash. Bluff upon which Inn is built marks a Recent fault scarp. Behind Inn northeast-dipping beds of Funeral fanglomerate overlie similarly dipping strata of Furnace Creek formation. Ridge on skyline is Lower Cambrian strata in fault contact with Furnace Creek strata at Furnace Creek fault zone along ridge base. Spence Air photo.